

**University of Colorado at Denver
Colorado State University
Mountain and Plains Education and Research Centers
Annual Program Highlights
Reporting Period: July 1, 2012 – June 30, 2013
Principle Investigator: Lee Newman**

Center Highlights

Continuing Education Program Director: David Gilkey

The Challenge: Drug overdose death rates in the US have more than tripled since 1990. During 2008, more than 36,000 people died from drug overdoses mostly from prescription drug overdoses. Opioid prescriptions account for the lion share of prescription drug overdose deaths. Workers who have been injured on the job and who develop chronic pain are often prescribed chronic opioids as a treatment approach in spite of scientific evidence indicating that opioids are not an effective treatment for chronic pain. There is a need to retrain clinicians so that they treat workers according to current medical guidelines, and minimize use of opioids.

Approach: To address the epidemic of prescription drug overdoses in this country, the Mountain & Plains ERC's Continuing Education program developed and launched an online course for healthcare providers who manage patients with chronic, non-cancer pain. Members of the Mountain & Plains ERC (Dr. Kathryn Mueller & Dr. Lee Newman), Rocky Mountain ERC (Dr. Kurt Hegmann) and the Northwest Center for Occupational Health and Safety (Dr. Gary Franklin) contributed expertise in evidence-based occupational medicine. By advising occupational health providers, primary care providers and others on evidence-based treatment guidelines for managing chronic pain, the online continuing education course aims to simultaneously stem the rising tide of opioid abuse and improve chronic pain patients' care. Development of the course was supported by an unrestricted educational grant from Pinnacol Assurance, a major worker's compensation insurer in Colorado, and in collaboration with the State Department of Labor, Division of Worker's Compensation.

Results: As of September, 2013, over 900 providers had taken the course since its launch in October 2012. Providers who take the course are asked to evaluate the course's impact their knowledge and clinical practice immediately after taking the course and at periodic intervals subsequently. An analysis of providers' responses immediately after they had taken the course was published in the Summer 2013 issue of the Journal of the Association of Occupational Health Professionals in Healthcare. Of the 387 respondents, 82% indicated that they intended to apply the knowledge from the course to change their medical practice. Recognizing that intent to change is not the same as an actual change in practice, the Mountain & Plains ERC is conducting ongoing evaluation of the course's impact on number and dose of opioid prescriptions in worker's compensation cases.

Impact: The Mountain & Plains ERC's course on chronic pain management provides important information to healthcare providers that can help reverse the national epidemic of prescription drug overdoses. Because this is the first course of its kind, because it was funded without any support from the pharmaceutical industry, and because early evaluations suggest that the training is effective in changing providers' chronic pain management practices, we have developed a number of key collaborations to promote dissemination of the course.

The course has been endorsed and promoted by Pinnacol Assurance, COPIC, the Colorado Medical Association, as well as other leaders in the healthcare sector. It has been made mandatory by the State Division of Worker's Compensation for any physician who treats injured workers. The Colorado Governor has appointed Dr. Newman to the executive committee of the state Consortium that will address the prescription drug abuse epidemic and expand the scope and use of our online training.

Ergonomics

Program Director: John Rosecrance

Increasing All Terrain Vehicle (ATV) Safety and Health Among Montana Ranchers

The Challenge: Between 1999 and 2008 there has been a 193% increase in occupational fatalities related to ATV use in the U.S. and 65% of the fatalities have occurred in the Agriculture sector. There are currently more than 16 million ATVs used by more than 10 million Americans. Eighty percent of riders use ATVs for recreational purposes while the remaining 20% of riders use ATVs for occupational needs. Montana ranchers led the nation in ATV related occupational fatalities between 2003 and 2006.

Approach: The High Plains Intermountain Center for Occupational Health and Safety (HICAHS) partnered with the Mountain & Plains ERC supported an initiative in rural Montana to increase awareness of ATV risks and hazards and promote safe vehicle operations. HICAHS provided a small community grant to enable the development of ATV Safety Tip Sheets for Ranchers. Through a series of focus groups group facilitated by the ERC- and HICAHS-supported university faculty and students, the rural agricultural/ranching community developed four ATV Safety Tip Sheets aimed at common ranching job-tasks: Animal Handling, Weed Spraying, Fence Mending and General Transportation. The tip sheets were disseminated through the entire community using multiple information channels.

Results: The ATV Safety Tip Sheets were mailed to all 64 Agricultural/ranching operations comprising 1,711 residents of McCone County, in addition being posted throughout the community. Posters and tri-folds were distributed by businesses, schools and handed out at the local county fair. A website was created to facilitate broader distribution throughout the state and nation providing downloadable Tip Sheets to all agricultural producers. Evaluation of community interest showed that 97% had read the Tip Sheets and 73% indicated that they would think more about safety during ATV related job tasks on their agricultural operations, due to the information provided. Fifteen percent indicated that the Tip Sheets contained new information and 17% reported that they were likely to change some aspect of ATV operation to increase safety. Sixty percent also indicated that they had shared the Tip Sheets with others. This project is one of several supported by the HICAHS and the Mountain & Plains ERC aimed at enhancing ATV safety on agricultural operations and building capacity to reduce injury and fatality among rural workers.

Impact: Through a partnership between two NIOSH-funded centers, faculty members and graduate students developed and effectively disseminated ATV safety educational materials to an entire county in rural Montana, to prevent future work-related injuries and fatalities in the ranching sector.

Interdisciplinary Training
Program Director: William Brazile

Trainees and Faculty Consulting with a Small Stone Fabrication Business to improve Safety

The Challenge: In the United States in 2007, there were approximately 303,000 companies with fewer than 100 employees in the manufacturing sector. This number represented 91% of the manufacturing establishments in the country. The owner of a small manufacturing company is legally responsible for tasks that larger companies delegate to technical experts with years of experience. Small manufacturers rarely have the financial resources large companies have to dedicate to occupational safety and health efforts. Government programs that offer technical assistance in occupational safety and health to small employers are under-resourced and overworked. Companies interested in making changes are often left with little guidance on how to manage health and safety hazards in their workplaces.

Approach: Trainees with the Mountain & Plains ERC's industrial hygiene and ergonomics training programs worked with a northern Colorado stone fabrication company to improve workplace health and safety. The company had recently been cited by OSHA for violating health and safety laws. OSHA's initial penalty was \$11,000. The Mountain & Plains ERC trainees took measurements of the noise levels workers were exposed to in the workplace. The trainees developed and helped implement a series of health and safety programs with the small manufacturing company, including a respiratory protection program, hazard communication program, lock-out/tag-out program and a hearing conservation program. In order to ensure that the independent programs integrated with each other and with the manufacturer's business model, the trainees also developed an occupational health and safety management system.

Results: The small business had their OSHA penalty reduced by \$5,000 as a direct result of working with the group of Mountain & Plains ERC trainees. The employer was pleased with the service of ERC trainees and was eager to adopt the recommended programs and procedures. The graduate students involved in the project gained invaluable experience consulting with a small manufacturer.

Impact: The Mountain & Plains ERC supports graduate students and faculty members who provide technical support to small employers that may not have the resources to hire a full-time occupational safety and health professional or a consultant. By partnering with businesses, the Mountain & Plains ERC provides a service to the community meanwhile developing a practically-trained interdisciplinary workforce.

Outreach #1
Program Director: Ken Scott

A High-Profile Champion of Workplace Safety and Health Promotion in Colorado

The Challenge: Despite the high prevalence of hazardous industries and occupations in the mountain and plains region, resources to systematically address occupational health challenges are relatively sparse compared to the rest of the country. When the Mountain & Plains ERC was founded in 2007, only one state in the region (New Mexico) had ever collected the baseline occupational health indicators recommended by the Council of State and Territorial Epidemiologists or been awarded a fundamental occupational health surveillance grant from NIOSH. Without systems in place to systematically collect occupational injury and illness data, occupational health and safety efforts are easily passed over in favor of other pressing public issues that are better defined.

Approach: Since its inception, the Mountain & Plains ERC has placed a high priority on tracking occupational injuries and illnesses in the region. For more than six years we have partnered with state agencies, NIOSH Western States Office, and other stakeholders to promote more accurate and comprehensive collection, analysis, and dissemination of occupational injury and illness data. In Colorado, we contributed to the first occupational health indicator report for the state and supported the Colorado Department of Public Health and Environment as it successfully developed a NIOSH-funded fundamental occupational health surveillance program. The Mountain & Plains ERC has also played a key role in the development of a non-profit organization called WorkSafe Colorado, that grew out of the surveillance partnership. WorkSafe Colorado represents state and federal agencies, the Colorado business community, worker organizations and academic institutions. The Mountain & Plains ERC holds a seat on the Executive Board for WorkSafe Colorado. The organization meets monthly to discuss and promote best practices in occupational safety and health.

Results: The Governor of Colorado signed a Proclamation that highlights the importance of a safe, healthy workforce for Colorado's economic development. The Proclamation, declaring June 2013 "Workplace Health and Safety Promotion Month" was read aloud by Colorado's Lieutenant Governor Joe Garcia at an event held at the Colorado State Capitol Building. The occupational safety and health practice community, policymakers, as well as local news media outlets attended the event.

Impact: The partnerships the Mountain & Plains ERC has forged with state and federal agencies, businesses and worker groups to improve occupational injury and illness surveillance in Colorado has grown into an effective non-profit organization called WorkSafe Colorado. With an endorsement from Colorado political leaders, WorkSafe Colorado will be well-positioned to effectively advocate for prevention programs.

Outreach #2

Program Director: Ken Scott

Health Promotion and Health Protection for Small Businesses

The Challenge: Despite the fact that small businesses employ the majority of individuals who work in the State of Colorado, and despite the fact that some small businesses are making efforts to improve the health and safety of their workers beyond what is legally required, there is little guidance or recognition for small business owners who want to promote and protect their workers' health.

Approach: During the summer of 2013, faculty and staff from the Mountain & Plains ERC and the Colorado School of Public Health launched Health Links™ Colorado. Health Links™ recognizes small businesses that champion worker wellbeing and safety with the Health Links™ Healthy Business Certification, a program that provides certification of small businesses for meeting or exceeding worker health, safety and wellness standards. For small businesses that are just getting started, Health Links™ provides support through a Kick-Start Program, that awards seed funding and provides free one-on-one advising to qualified small business for building worksite wellness and safety programs. In addition to support from the National Institute for Occupational Safety and Health, Health Links™ is supported by philanthropic gifts from Pinnacol Assurance and the Hollis Family Trust.

Results: The launch of Health Links™ Colorado was attended by over 160 members of Pueblo, Colorado's small business community. The event featured presentations from the Pueblo Chamber of Commerce, the Pueblo County Health Department, San Isabel Electric Association, Pinnacol Assurance and the Mountain & Plains ERC.

Impact: Health Links™ is an innovative program recognizing and supporting small businesses that promote the health and safety of their employees. Health Links™ will, during the coming year, distribute awards ranging from \$250-\$1,000 to provide seed funding for small businesses' health promotion and health protection programs. By recognizing the efforts of small businesses, Health Links aims to instill a culture of health and a culture of safety, throughout Colorado's business community, in keeping with the principles of "Total Worker Health."™